# Remarks on the taxonomy of the genus Ekleptostylis Stebbing, 1912 (Crustacea: Cumacea: Diastylidae) 

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#### Abstract

The adult male and female of Leptostylis vemae Bǎcescu-Meşter, 1967 are described and illustrated. This species is transferred to the genus Ekleptostylis Stebbing, 1912 and the description of Ekleptostylis heardi McLelland \& Meyer, 1998 is emended. Both species were found in the Magellan Strait, Beagle Channel, Drake Passage and off Argentina. In addition, E. vemae was found off Uruguay. Diastylis pseudinornata Ledoyer, 1977 from the Kerguelen Islands also is transferred to the genus Ekleptostylis, resulting in a total of four species now in this genus.


Papers on the cumacean fauna from southern South America have been rather scanty. Most of the species described from this region come from two important expeditions: the "Hamburger Magalhaensische Sammelreise 1892/93" and the "Vema Expeditions" 1958-1961 from the Lamont Geological Observatory, USA (see Zimmer 1902, Băcescu-Meşter 1967, Bǎcescu 1969, Bǎcescu \& Muradian 1974; Muradian 1976, 1979; Băcescu \& Petrescu 1991; Petrescu 1994, 1995).

A large collection of Cumacea from the Magellan region was obtained during the Joint Chilean-German-Italian Magellan "Victor Hensen" Campaign in 1994. Based on this material, some additional samples from Argentina and Uruguay, and the examination of the relevant type material, a study on the genus Ekleptostylis Stebbing, 1912 is presented.

In this paper the adult male and female of Leptostylis vemae Băcescu-Meşter, 1967 are described and the description of Ekleptostylis heardi McLelland \& Meyer, 1998 is emended. Leptostylis vemae and Diastylis pseudinornata Ledoyer, 1977 are trans-
ferred to Ekleptostylis, resulting in a total of four species now in this genus.

Materials and Methods
Most of the specimens studied were collected during the Joint Chilean-GermanItalian Magellan "Victor Hensen" Campaign, 1994. The largest number of cumaceans was obtained with an epibenthic sledge (see Brandt \& Barthel 1995). Other specimens were collected with a small dredge (opening: $0.43 \times 0.18 \mathrm{~m}$ ) equipped with a net of 0.3 mm mesh to sample smaller crustaceans. Only two specimens were obtained with a grab. For more information on this campaign see Arntz \& Gorny (1996).

In addition, specimens from Argentina included those taken during the GermanArgentine cruise aboard the F.R.V. Walther Herwig (WH 31), the Japanese-Argentine cruise aboard the R/V Shinkai Maru, both in 1978, and the Argentine cruise OB-08/ 88 (INIDEP, Mar del Plata). Lastly, specimens from Uruguay were collected during the cruise Aldebarán 9508 (INAPE, Montevideo).

The abbreviation ZMH refers to the Zoologisches Museum, Hamburg; ZMB, Museum für Naturkunde, Berlin; MNHN, Museum National d'Histoire Naturelle, Paris; USNM, United States National Museum, Smithsonian Institution, Washington, D.C.; GCRL, Gulf Coast Research Laboratory, Ocean Springs, Mississippi; INAPE, Instituto Nacional de Pesca, Montevideo; MACN, Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires; INIDEP, Instituto Nacional de Investigación y Desarrollo Pesquero, Mar del Plata.

In addition to the specimens listed in the "Material examined" sections (see below), the following type material was examined:

Ekleptostylis walkeri (Calman, 1907). Golfe de Gascogne, près de l'île d'Yeu, ? 100 m : 1 ovigerous female, 1 adult male (Syntypes) (MNHN Cu 111).

Diastylis pseudinornata Ledoyer, 1977. Mission "Marion-Dufresne" 3: Sta. 8 prél. 25, N. île Heard (îles Kerguelen), 90 m, 8 April 1974: 13 ovigerous females, 3 juveniles (Paratypes) (MNHN Cu 137).

In their description of Ekleptostylis heardi, McLelland \& Meyer (1998) designated a paratype series (USNM 230403) and also included additional specimens (GCRL 1372). However, these two samples contain some specimens of Ekleptostylis vemae (Băcescu-Meşter, 1967). Therefore, these misidentified specimens have been listed in the "Material examined" section of $E$. vemae; the remaining ones have been included in the "Material examined" section of $E$. heardi.

Order Cumacea Kröyer, 1846
Family Diastylidae Bate, 1856
Genus Ekleptostylis Stebbing, 1912
Ekleptostylis Stebbing, 1912: 146, 143.Stebbing, 1913: 129.-Fage, 1951: 124-126.-Day, 1980: 224.-Băcescu, 1992: 336.-McLelland \& Meyer, 1998: 278.

Type species (by monotypy): Leptostylis walkeri Calman, 1907 (MNHN Cu 111).

Diagnosis.-Carapace smooth, eyes lacking. First antenna with third peduncular article dilated in preadult male and a large number of aesthetascs on first article of the main flagellum in adult male. Second antenna reaching end of body in adult male. Third maxilliped with an exopod in both sexes. Second pereopod not widely separated from third in adult female. Third and fourth pereopods with rudimentary exopods in adult female. Basis of second pereopod distally produced in adult male (the bases of third and fourth pereopods are also distally produced in the adult males of $E$. vemae (Băcescu-Meşter, 1967) and E. heardi McLelland \& Meyer, 1998). Uropod with a 3-articulate endopod, equal to or slightly longer than the exopod. Telson from $4 / 5$ to slightly longer than last abdominal segment in adult female and from slightly longer to almost twice as long as last abdominal segment in adult male; in both sexes telson shorter than uropod peduncle and furnished with 3 or more lateral spines and 2 distal ones, in adult male a broadly laminar preanal part produced over a narrow postanal part.

> Ekleptostylis vemae (Băcescu-Meşter, 1967), new combination Figs. 1-6

Leptostylis vemae Băcescu-Meşter, 1967: 266-268, figs. 1, 2.-Petrescu \& Băcescu, 1991: 390.-Băcescu, 1992: 345.

Material examined.-Vic Hen 1253 ( $54^{\circ} 55.1^{\prime} \mathrm{S}, 69^{\circ} 19.9^{\prime} \mathrm{W} ; 265 \mathrm{~m}$ ), $4360 \mathrm{spec}-$ imens (ZMH, K-39571); 20 specimens (MACN 34196). Vic Hen 1246 ( $54^{\circ} 58^{\prime}$ S, $68^{\circ} 49^{\prime}$ W; 253 m ): 11 specimens, Vic Hen 1247 ( $54^{\circ} 59^{\prime} \mathrm{S}, 69^{\circ} 05^{\prime} \mathrm{W} ; 100 \mathrm{~m}$ ): $317 \mathrm{spec}-$ imens, Vic Hen 1248 ( $54^{\circ} 59^{\prime} \mathrm{S}, 69^{\circ} 02^{\prime}$ W; $217 \mathrm{~m}): 130$ specimens, Vic Hen 1263 ( $54^{\circ} 54^{\prime} \mathrm{S}, 70^{\circ} 13^{\prime} \mathrm{W}$; 665 m ): 1 specimen, Vic Hen 1270 ( $54^{\circ} 55^{\prime} \mathrm{S}, 70^{\circ} 45^{\prime} \mathrm{W}$; 135 m ): 12 specimens, Vic Hen 1307 ( $54^{\circ} 17^{\prime}$ S, $70^{\circ} 52^{\prime} \mathrm{W} ; 271 \mathrm{~m}$ ): 2 specimens; all of them in the collection of the Zoologisches Museum, Universität Hamburg (ZMH, K-

39565 to K-39570). Vic Hen 843 ( $53^{\circ} 09^{\prime}$ S, $70^{\circ} 39^{\prime}$ W; 127 m ): 18 specimens, Vic Hen 874 ( $53^{\circ} 44^{\prime} \mathrm{S}, 70^{\circ} 56^{\prime} \mathrm{W} ; 335 \mathrm{~m}$ ): 14 specimens, Vic Hen 887 ( $53^{\circ} 42^{\prime}$ S, $70^{\circ} 57^{\prime}$ W; 100 m): 10 specimens, Vic Hen 958 ( $52^{\circ} 58^{\prime}$ S, $70^{\circ} 41^{\prime} \mathrm{W} ; 111 \mathrm{~m}$ ): 7 specimens, Vic Hen 980 ( $53^{\circ} 43^{\prime} \mathrm{S}, 70^{\circ} 50^{\prime} \mathrm{W} ; 522 \mathrm{~m}$ ): 7 specimens, Vic Hen 1077 ( $54^{\circ} 53^{\prime} \mathrm{S}, 69^{\circ} 30^{\prime} \mathrm{W}$; 347 m): 12 specimens, Vic Hen 1089 ( $54^{\circ} 55^{\prime} \mathrm{S}, 69^{\circ} 20^{\prime} \mathrm{W} ; 272 \mathrm{~m}$ ): 200 specimens, Vic Hen 1110 ( $54^{\circ} 55^{\prime} \mathrm{S}, 6^{\circ} 19^{\prime} \mathrm{W} ; 96 \mathrm{~m}$ ): 3 specimens, Vic Hen 1119 ( $54^{\circ} 56^{\prime}$ S, $69^{\circ} 14^{\prime}$ W; 208 m ): 17 specimens, Vic Hen 1124 ( $54^{\circ} 59^{\prime} \mathrm{S}, 6^{\circ} 02^{\prime} \mathrm{W}$; 202 m ): 471 specimens, Vic Hen 1140 ( $54^{\circ} 55^{\prime} \mathrm{S}, 68^{\circ} 39^{\prime} \mathrm{W}$; 310 m ): 40 specimens; all of them in the collection of the Museum für Naturkunde, Berlin (ZMB 27312). R/V Eltanin Cruise 6, Station 363, 600 km north of Antarctic Peninsula ( $57^{\circ} 09^{\prime} \mathrm{S}, 58^{\circ} 58^{\prime} \mathrm{W}$ ), $3590 \mathrm{~m}, 7-8$ Dec 1962: 4 ovigerous females, 2 preparatory females, 3 adult males, and 2 juveniles (USNM 230403). R/V Eltanin Cruise 6, Station 344, 500 km east of Tierra del Fuego ( $54^{\circ} 04^{\prime} \mathrm{S}, 58^{\circ} 46^{\prime} \mathrm{W}$ ), $119 \mathrm{~m}, 4 \mathrm{Dec} 1962$ : 1 ovigerous female (GCRL 1372). WH I663 ( $44^{\circ} 33.6^{\prime} \mathrm{S}, 62^{\circ} 59.6^{\prime} \mathrm{W}$; 95 m ): $1 \mathrm{spec}-$ imen, WH II-662 ( $44^{\circ} 56.7^{\prime} \mathrm{S}, 62^{\circ} 24.6^{\prime} \mathrm{W}$; 100 m ): 13 specimens, INAPE 9508-17 ( $35^{\circ} 53^{\prime} \mathrm{S}, 53^{\circ} 27^{\prime} \mathrm{W}$; 95 m ): 1 specimen; all of them in the collection of one of the authors (DR).

Description of the adult male.-Total body length $6.3-6.6 \mathrm{~mm}$ (from tip of pseudorostrum to tip of telson).

Carapace (Figs. 1A, 6B, C) smooth, glossy with small pits, width approximately 0.8 times length; depth approximately 0.6 times length. Sides with ventral carina starting on posterior margin of carapace, running horizontally, and ending at approximately one-half distance along the carapace. Posterior mid-dorsal area with shallow depression and poorly developed hump. Antennal antero-lateral corner not produced. Antero-lateral margin of carapace with truncate extensions not acutely serrate. Pseudorostrum moderately produced, ocular lobe small, eyes absent. Free
five thoracic segments together approximately one-half as long as carapace. First segment overlapped by carapace and by an-tero-lateral margin of second segment, followed by four segments with free lateral margins. Abdomen approximately as long as cephalothorax, with a pair of pleopods on first and second segments and 2 pairs of setae on third and fourth segments.

Telson (Figs. 3C, 6D, E): almost twice as long as last abdominal segment, slightly longer than half of uropod peduncle. Preanal part strongly produced posteriorly over the postanal part, with a mid-dorsal depression bounded by a sharp carina and bearing 2 tiny sensorial setae near distal end. Postanal part armed with $4-5$ spines on each side and 2 stout spines distally.

First antenna (Fig. 1B): Peduncle with first article approximately as long as other two combined. Main flagellum 6-articulate, first article with a conspicuous, thick brushlike tuft of non-segmented aesthetascs, third article the longest, fifth with 1 -segmented aesthetasc, sixth article with 1 aesthetasc proximally, similar to that of the preceding article, and 1 long seta distally. Accessory flagellum 4-articulate, fourth article minute with 1 minuscule and 1 long simple seta.

Second antenna: Peduncle, first and second articles with 1 and 2 plumose setae, respectively, first, third and fourth articles subequal, approximately two thirds as long as second; fifth article slightly longer than first four articles together. Flagellum extending slightly beyond end of uropods, with approximately 20 articles (all the antennae examined were twisted/wrinkled, preventing an exact count of articles).

Mouthpart: Mandible boat-shaped, with a lacinia mobilis and 11 setae between incisor and molar processes. First maxilla, palp with 2 distal setae (filaments). Second maxilla with 2 enditae.

First maxilliped (Fig. 1C): Basis slightly longer than remaining articles together, inner margin with a row of 3-5 long plumose setae on dorsal surface (distal one thickest) and 1 distal plumose seta on ventral sur-


Fig. 1. Ekleptostylis vemae (Băcescu-Meşter, 1967). Adult male. A, habitus; B, first antenna; C, first maxilliped; D, second maxilliped. Scales: A: 1 mm ; B, D: 0.3 mm ; C: 0.2 mm .
face. Merus with 1-2 denticulations on outer margin and 3 short plumose setae on distal inner margin (not drawn). Carpus with a row of spines on inner margin and numerous setae on inner margin and dorsal surface (not drawn), outer margin with 1-2 denticulations basally and 2 contiguous unequal plumose setae distally. Propodus with 2 unequal plumose setae, 1 simple seta and 2 weak spines distally, and numerous simple setae on dorsal surface (only some drawn). Dactylus with 2 distal spines and 2 subterminal setae.

Second maxilliped (Fig. 1D): Basis slightly shorter than remaining articles together; with 2 plumose setae on inner margin, 1 ventral plumose seta medially, and 2 short, weak spines, and a few transparent scales on outer margin. Ischium wedgeshaped. Merus with 3 large distal plumose setae, 2 on inner margin and 1 on outer margin. Carpus longer than propodus and dactylus together, with 6-7 plumose setae and 1 tooth on distal half of inner margin, and 2 plumose setae at outer distal margin. Propodus with 1 long plumose ventral seta in middle of article, 1 long seta with a few short setules on distal outer corner, and 3 rows of plumose setae at inner margin (only some drawn). Dactylus with distal setae.

Third maxilliped (Fig. 2A): Basis almost twice as long as remainder of appendage, with a row of plumose setae on inner margin, 4 plumose setae on outer distal corner, and a serration of $4-8$ teeth on inner distal margin. Ischium with 1 plumose seta on inner margin. Merus with strong tooth on ventral face, 1 plumose seta on distal outer corner, and 2 plumose setae on inner margin. Carpus approximately as long as ischium and merus together, with strong tooth on distal inner corner, 1 plumose seta on distal outer corner, 5 plumose setae on inner margin (only ventral ones drawn). Propodus with 5 weakly plumose setae on inner margin (only ventral ones drawn) and 1 on distal outer corner. Dactylus shorter than propodus, bearing simple and pectinate setae.

Exopod shorter than basis, basal article expanded.

First pereopod (Fig. 2B): Basis slightly more than half as long as remaining articles combined, and approximately as long as propodus and dactylus together, with plumose setae on lateral and distal margins, longest seta extending beyond merus, and simple setae on ventral surface. Ischium subequal to merus, with 1 simple seta on inner margin. Merus with 1 simple seta on inner margin and 2 plumose setae on outer margin. Last three articles with simple setae only. Carpus approximately three fourths as long as propodus. Dactylus approximately 0.8 times as long as carpus. Exopod shorter than basis, basal article expanded.

Second pereopod (Fig. 2C): Basis robust, slightly longer than following four articles together, with several simple and plumose setae; inner corner developed into a conspicuous rounded process extending beyond ischium, bearing 1 plumose seta. Ischium bare, following articles with simple setae. Merus, slightly less than half as long as carpus. Carpus slightly shorter than propodus and dactylus together, with 4-6 spines distally (spine(s) behind propodus not drawn). Propodus with 1 spine distally. Dactylus more than twice as long as propodus. Exopod approximately as long as basis, basal article expanded.

Third pereopod (Fig. 2D): Basis robust, approximately twice as long as the remaining articles combined, inner corner developed into conspiscuous rounded process extending as far as ischium, bearing 1 simple seta. Carpus next longest article, with 3 annulate distal setae. Propodus with 1 annulate distal seta. Dactylus with 1 small medial simple seta and 2 extremely unequal distal simple setae: one minuscule, other approximately $3-4$ times as long as article. Exopod approximately as long as basis, basal article expanded.

Fourth pereopod as third, except for: Basis being approximately 1.5 times as long as remaining articles combined.

Fifth pereopod (Fig. 2E): Basis weak,


Fig. 2. Ekleptostylis vemae (Băcescu-Meşter, 1967). Adult male. A, third maxilliped; B, first pereopod; C, second pereopod; D, third pereopod; E, fifth pereopod. Scales: 0.5 mm .


Fig. 3. Ekleptostylis vemae (Bǎcescu-Meşter, 1967). Adult male. A, first pleopod; B, second pleopod; C, uropod and telson. Scales: A, B: 0.3 mm ; C: 0.5 mm .
shorter than remaining segments combined, with 2 plumose setae laterally and 2 simple setae distally. Carpus, slightly more than half as long as basis. Distal setae of carpus, propodus and dactylus as in third and fourth pereopods.

First pleopod (Fig. 3A): Basis with 3-4 short spines followed by 5-7 plumose setae on inner margin. Endopod 1 -articulate, with 2 unequal plumose setae on inner margin and 3 strong, weakly plumose setae distally. Exopod 2-articulate, distal article with 1
plumose seta on outer margin and 3 strong, weakly plumose setae distally.

Second pleopod (Fig. 3B) similar to first, except for: Basis more elongate, inner margin with $4-6$ short spines and without plumose setae. Endopod, outer margin without plumose setae. Distal setae of both rami with abundant setules.

Uropod (Fig. 3C): Peduncle with 21-29 spines on inner margin. Rami subequal, approximately half as long as peduncle. Endopod 3-articulate, proximal and medial ar-
ticles subequal, with $7-8$ and $4-5$ spines, respectively; distal article approximately half as long as proximal ones, with 1 spine laterally, and 2 unequal spines and 1 small simple seta distally. Exopod 2-articulate, with oblique joint; with several small ventral (not drawn) and lateral simple setae along distal article, 1 long distal spine, and 2 small distal setae (or weak spines).

Description of the ovigerous female.Total body length $3.9-5.6 \mathrm{~mm}$ (from tip of pseudorostrum to tip of telson).

Carapace (Figs. 4A, 6A) smooth, glossy with small pits and small setae (setae also present on thorax and abdomen), width approximately equal to length, depth approximately 0.8 times length. Posterior mid-dorsal area with shallow depression and poorly developed hump. Antero-lateral angle poorly developed. As in male, antero-lateral margin of carapace with row of flat-topped teeth. Pseudorostrum moderately produced, ocular lobe small, eyes absent. Free five thoracic segments together slightly more than half as long as carapace, all visible dorsally and laterally; second segment with rounded process on each side. Abdomen approximately as long as cephalothorax.

Telson (Fig. 5B) slightly longer than last abdominal segment, and slightly longer than half of uropod peduncle. Preanal part not produced. Postanal part armed with 34 spines on each side and 2 stout spines distally.

First antenna (Fig. 4B): First article of peduncle stout, slightly shorter than second and third articles combined; second article slightly shorter than third. Main flagellum 3-articulate, first article the longest, second with 1 -segmented aesthetasc distally, third with 1 aesthetasc proximally, similar to that of the preceding article, and 1 long seta distally. Accessory flagellum 3-articulate, not reaching end of first article of main flagellum.

Second antenna (Fig. 4C) 3-articulate, with 2,1 and 1 plumose setae on first, second and third articles, respectively.

Mouthparts and first maxilliped as in male.

Second maxilliped as in male, except for basis, without scales on outer distal margin but with a group of approximately 10 scales on ventral surface at two thirds distance along the article.

Third maxilliped (Fig. 4D) as in male, except for basis slender, inner margin with only 1 tooth distally. Propodus with 3 weakly plumose setae on inner margin (only ventral one drawn). Exopod slender.

First pereopod (Fig. 4E) as in male, except for basis approximately half as long as remaining articles together and slightly shorter than propodus and dactylus together. Carpus approximately two thirds as long as propodus. Exopod, basal article not expanded.

Second pereopod (Fig. 5A) as in male, except for basis approximately as long as following three articles together, slender and without rounded process on inner distal corner. Ischium with 1 simple seta. Merus approximately two thirds as long as carpus. Carpus approximately 0.6 times as long as propodus and dactylus together, with 3-4 spines distally (spine(s) behind propodus not drawn). Exopod longer than basis, basal article not expanded.

Third, fourth and fifth pereopods: Bases weak and without distal processes; third one the longest, approximately 1.5 times as long as remaining articles combined, other two, slightly longer and shorter than remaining articles combined, respectively. Distal setae of carpus, propodus and dactylus as in the male. Third and fourth pereopods each with rudimentary 2 -articulate exopod.

Uropod (Fig. 5B) as in male, except for peduncle with $10-11$ spines on inner margin. Endopod exceding exopod by its distal article and approximately 0.7 times as long as peduncle; proximal and medial articles with 2 and $2-3$ spines, respectively; distal article without lateral spines.

Distribution.-Previously recorded from off Argentina between 70 and 107 m (Bă-


Fig. 4. Ekleptostylis vemae (Băcescu-Meşter, 1967). Marsupial female. A, habitus; B, first antenna; C, second antenna; D, third maxilliped; E, first pereopod. Scales: A: $1 \mathrm{~mm} ; B: 0.3 \mathrm{~mm} ; \mathrm{C}: 0.2 \mathrm{~mm} ; \mathrm{D}, \mathrm{E}: 0.5 \mathrm{~mm}$.


Fig. 5. Ekleptostylis vemae (Băcescu-Meşter, 1967). Marsupial female. A, second pereopod; B, uropod and telson. Scales: 0.5 mm .
cescu-Meşter 1967) and Brazil at 35 m (Petrescu \& Bǎcescu 1991), it has now been found off Uruguay, at additional stations off Argentina, in the Magellan Strait, Beagle Channel and Drake Passage, between 95 and 3590 m .

Ekleptostylis heardi McLelland \& Meyer, 1998

Ekleptostylis heardi McLelland \& Meyer, 1998:279-285, figs. 1-5.

Material examined.-Holotype (USNM 230401), R/V Eltanin Cruise 6, Station 363,

600 km north of Antarctic Peninsula ( $57^{\circ} 09^{\prime} \mathrm{S}, 58^{\circ} 58^{\prime} \mathrm{W}$ ), $3590 \mathrm{~m}, 7-8 \mathrm{Dec}$ 1962: 1 preparatory female. Paratypes (USNM 230403), from same sample: 14 ovigerous females, 2 preparatory females, 5 adult males, 2 juveniles. R/V Eltanin Cruise 6, Station 344, 500 km east of Tierra del Fuego ( $54^{\circ} 04^{\prime} \mathrm{S}, 58^{\circ} 46^{\prime} \mathrm{W}$ ), $119 \mathrm{~m}, 4 \mathrm{Dec}$ 1962: 10 ovigerous females, 7 preparatory females, 6 adult males (GCRL 1372). Vic Hen $1206\left(55^{\circ} 48^{\prime} \mathrm{S}, 66^{\circ} 58^{\prime} \mathrm{W} ; 66 \mathrm{~m}\right): 13$ specimens in the collection of the Zoologisches Museum, Universität Hamburg (ZMH, K-39545). Vic Hen 884 ( $53^{\circ} 43^{\prime}$ S,


Fig. 6. Ekleptostylis vemae (Bǎcescu-Meşter, 1967). SEM photographs. A, Marsupial female: dorsal view of carapace. B-E. Adult male: B, dorsal view of carapace; C, row of flat-topped teeth on antero-lateral margin of carapace (see arrow); D, dorsal view of telson; E, lateral view of telson.
$\left.70^{\circ} 57^{\prime} \mathrm{W} ; 51 \mathrm{~m}\right): 2$ specimens, Vic Hen 1192 ( $55^{\circ} 07^{\prime} \mathrm{S}, 67^{\circ} 02^{\prime} \mathrm{W} ; 40 \mathrm{~m}$ ): 2 specimens, Vic Hen 1210 ( $55^{\circ} 48^{\prime}$ S, $66^{\circ} 59^{\prime}$ W; 66 $\mathrm{m}): 14$ specimens, Vic Hen 1240 ( $55^{\circ} 05^{\prime}$ S, $66^{\circ} 48^{\prime} \mathrm{SW} ; 33 \mathrm{~m}$ ): 3 specimens; all of them in the collection of the Museum fur Natur-
kunde, Berlin (ZMB 27313). SM IV$14\left(37^{\circ} 59.5^{\prime} \mathrm{S}, 55^{\circ} 32.7^{\prime} \mathrm{W} ; 99 \mathrm{~m}\right)$ : 2 specimens, SM III-I9 $\left(38^{\circ} 29.5^{\prime} \mathrm{S}, 55^{\circ} 58.0^{\prime} \mathrm{W} ; 92\right.$ $\mathrm{m}): 20$ specimens, SM VI- $24\left(41^{\circ} 05.3^{\prime} \mathrm{S}\right.$, $64^{\circ} 24.6^{\prime} \mathrm{W} ; 128 \mathrm{~m}$ ): 20 specimens, SM VII$69\left(45^{\circ} 29.6^{\prime} \mathrm{S}, 62^{\circ} 29.7^{\prime} \mathrm{W}\right.$; 95 m$): 1$ speci-
men, OB-08/88 ( $43^{\circ} 52^{\prime} \mathrm{S}, 64^{\circ} 36^{\prime} \mathrm{W}$; depth: ?): 2 specimens; all of them in the collection of one of the authors (DR).

Differing form the original description as follows:

Ovigerous female.-First antenna, aesthetascs arrangement as in E. vemae, i.e., second and third articles of main flagellum with 1 aesthetasc each; accessory flagellum without aesthetascs.

Second antenna: as in E. vemae, i.e., composed of 3 articles (not 2) and with 4 (not 3 ) plumose setae ( 3 long lateral and 1 short distal).

Second maxilla: 2-articulate maxillar palp mentioned in the original description is a thick, short seta with setules emerging from all around the shaft (pappose seta).

First maxilliped as in E. vemae except for basis with a row of 6 plumose setae on inner margin.

Second maxilliped: Composed of 7 articles; ischium wedge-shaped. Setation as in E. vemae, except for basis bearing 3 weak spines ( 2 in $E$. vemae) on outer distal margin and 3 plumose setae on inner distal margin (2 in E. vemae).

Third maxilliped: Ventral surface of merus and inner distal margin of carpus each with 1-2 strong teeth (it was not possible to confirm if the basis has distal spines on inner margin). Other aspects as in E. vemae, viz., basis with 4 (not 3) plumose setae on outer distal corner, carpus with 5 (not 3 ) plumose setae on inner margin, propodus with 3 (not 2) weakly plumose setae on inner margin.

First pereopod: Basis with longest distal seta extending beyond merus.

Second pereopod: Basis slightly longer than next 3 articles combined.

Adult male.-Telson almost 1.5 times as long as last abdominal segment (not $0.69 \times$ length of last abdominal segment).

First antenna: First article of the peduncle slightly shorter than other two combined. Other aspects as $E$. vemae, viz., main and accessory flagella 6- and 4 -articulate (not 5- and 2-articulate).

Third maxilliped as in female, except for: Endopod basis and basal article of exopod thicker; merus without tooth on ventral surface (carpus with tooth on inner distal corner); propodus with 5 weakly plumose setae on inner margin.

Second, third and fourth pereopods with rounded apical process on basis.

Distribution.-Previously recorded from the Drake Passage ( 3590 m) and off Argentina ( 119 m ) (McLelland \& Meyer 1998), it has now been found at additional stations off Argentina, in the Magellan Strait and Beagle Channel, between 33 and 128 m.

## Discussion

Stebbing (1912) erected the genus Ekleptostylis to include Leptostylis walkeri Calman, 1907, a species whose adult male has a telson with a lobe strongly produced over the narrow distal portion. Fage (1951) provided a more thorough description of this species, and added two other important features to the generic diagnosis, presence in adult male of both an apical process on the basis of the second pereopod and first antenna reaching the end of the body. The combination of these three characters adequately diagnoses the genus, although absolute determination is possible only in the presence of adult males.

For a long time the genus Ekleptostylis was monotypic and only known for the eastern North Atlantic (Stebbing 1912) and the Mediterranean Sea (Fage 1951, Kataǧan 1982). Most recently, a new species belonging to the genus Ekleptostylis was described for Antarctic and sub-Antarctic waters: E. heardi McLelland \& Meyer, 1998.

Băcescu-Meşter (1967) described Leptostylis vemae, on the basis of some immature specimens collected off Patagonia. Among the material studied here were several thousands adult males of this species. We now believe that $L$. vemae is congeneric with Ekleptostylis walkeri and therefore, we have transferred this species to the genus Ekleptostylis.

Diastylis pseudinornata Ledoyer, 1977 from the Kerguelen Islands is another species that we believe should be transferred to the genus Ekleptostylis. The fact that this species may belong in the genus Ekleptostylis has already been suggested by McLelland \& Meyer (1998). Ledoyer (1977) included a male in the paratype series of $D$. pseudinornata, but we were unable to locate this specimen. However, according to Ledoyer's description and figures, the male of $D$. pseudinornata has the second antenna extending to the end of the body and the preanal part of telson strongly produced over the postanal part. In our opinion, these two characters are sufficient to transfer this species to the genus Ekleptostylis, although nothing is known about the second pereopod.

The genus Ekleptostylis includes now the following four species: E. walkeri (Calman, 1907) (type species) from the Mediterranean and east Atlantic (Bay of Biscay), E. vemae (Băcescu-Meşter, 1967) and E. heardi McLelland \& Meyer, 1998 from southern South America and Antarctica (Drake Passage), and E. pseudinormata (Ledoyer, 1977) from the Kerguelen Islands.

Ekleptostylis walkeri (type species) differs from the other three species of the genus in the adult female having 14-15 lateral spines on the telson and the distal article of the uropod endopod being slightly shorter than the basal article.

Ekleptostylis vemae is easily separated from the other three species because the an-tero-ventral margin of carapace has truncate extensions; pereopods 3 to 5 have one very long and one minute seta at the dactylus, and the antero-lateral angle of the carapace is poorly developed in females.

Ekleptostylis pseudinornata resembles E. heardi in the presence of a well-developed antero-lateral angle, the antero-ventral margin of the carapace is serrate, and the dactylus of pereopods 3 to 5 bearing two subequal distal setae; the most striking difference between these two species is that the ovigerous female of E. pseudinornata has a
pair of rounded processes on the first two free thoracic segments, which are lacking in $E$. heardi.

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